

PATENT

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

#16
LDJ
2-13-04

Title: "Method and Apparatus for Automatically Processing Acquired Data and Contextual Information and Associating the Same with Available Multimedia Resources"

Applicant(s): MINER, Cameron

Attorney Docket No.: AM9-99-0227

Serial No.: 09/515,699

Filed: February 29, 2000

Examiner: Young N. Won
Art Unit: 2155

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FEB 06 2004

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Technology Center 2100

SUPPLEMENTAL APPEAL BRIEF

REQUEST FOR REINSTATEMENT OF APPEAL

Dear Sir:

REQUEST FOR REINSTATEMENT OF APPEAL

In response to the office action of October 31, 2003, Applicant respectfully requests the reinstatement of the appeal.

SUMMARY PROSECUTION HISTORY

Claims 1 - 3, 5 - 14, 16 - 20, 39, 40, and 42 - 46 are pending and remain in the application. In the Final Office Action of May 12, 2003 and the Advisory Action of June 27, 2003, the claims were indicated to be finally rejected as being unpatentable over Jain et al., U.S. Patent No. 5,911,139 in view of

Polnerow et al., U.S. Patent No. 5,813,006. The Examiner accepted the arguments presented in Applicant's Appeal Brief, and presented new arguments based at least in part, on different prior art references.

CLAIM CANCELLATION

Claim 2 is canceled without prejudice.

ISSUES ON APPEAL

The current issues for review are:

- (1) Whether claims 1, 3, 5 - 7, 11 - 13, 16 - 17, 39 - 43, and 45 - 46 are anticipated by Smith et al. (U.S. Pat. No. 5,970,499), hereinafter referred to as "Smith."

- (2) Whether claims 8 - 10, 14, 18 - 20, and 44 are obvious in view of Smith, *supra*, in view of Bull et al. (U.S. Pat. No. 5,901,287), hereinafter referred to as "Bull."

SUMMARY OF THE INVENTION

The present invention relates to a software program for accessing, transducing, enhancing, searching, or otherwise processing various contextual data acquired from objects. The present invention automatically associates the acquired contextual information with available multimedia resources and presenting the results to the user.

The term "contextual" has been clearly defined as follows: "As used herein, contextual means or implies the surrounding circumstances in which an object exists or an event occurs. For example, the contextual content of a photograph can be all the information surrounding the situation in which the photograph is taken, including special and physical parameters such as time, location, elevation, etc., as well as information gathered by various sensors such as temperature, pressure, humidity, light level, sound, and acceleration sensors, and user interface elements such as buttons, switches, etc. The contextual data helps to understand the context of the acquired data."

Reference is made to page 5, lines 5 – 12 of the specification.

The present system includes a contextual multimedia association module which is installed on a contextual input device. In use, the user captures input data about an object or item of interest by means of the contextual input device, and transmits the captured data to the personal assistant device. The personal assistant device automatically digitizes and processes the input data, and further automatically formulates a query, creates or updates a digital user profile, and transmits the query to the contextual multimedia association module. The contextual multimedia association applies the query to numerous data stores, optimizes the search results, and then presents the optimized search results to the user.

The present system provides various features, including but not limited to the following:

Image magnification with anti-jitter or jitter reduction feature.

Image search capability, whereby the system automatically formulates a query, searches for, and matches the image content of an object to images in various data stores. This image search capability allows the system and method to be used in various commercial applications such as:

- Information access based on data acquired from real objects.
- The association of on-line "virtual" information with physical "real" objects.
- E-commerce: The system enables on-line shopping in-situ based on imaged items.
- Remote medical and treatment: For example, a dermatologist can image a skin rash, and the system compares a skin lesion to known diseases and acquires additional information from various online medical databases.
- Security, personal information, electronic validation of information to create a "digital witness", digital notary public, digital signature capture, insurance: For example, facial recognition of a customer can be taken at the time of sale. As another example, a signature can be captured or insurance photos taken and authenticated by time and location. As another example, the system can validate images and their authenticity.
- Advanced information access in museums: For example, images of art works can be acquired by a curator, and the system will recognize these works and present relevant details.
- Automotive diagnostic: For example, a mechanic can image a car vehicle identification number (VIN) and take a picture of the part of interest. The system will match the images and display relevant pages from shop manuals.

•Triage: For example, damages and / or injuries can be taken at an accident site, and the system can perform an automatic search and sorting (e.g. triage) of patients, suggest courses of action, and request authorization for settlement, repair, indemnification, medical care, and so forth.

Expanded optical character recognition (EOCR) of text acquired from real objects, such as books, road signs, shopping, and so forth, with automatic Internet search capability.

Education, training and translation; for example, students can input a query, or the system can automatically formulate a query from an imaged object of interest, and the system will OCR the relevant text, perform translation if needed, and undertake an in-depth search of data stores around the world, even if the information is stored in different languages. The search results are translated to the language of interest and presented to the student. This feature can also be used for in-store shopping. For example, when shopping for books, book titles could be scanned, and related books will be displayed.

Audio to text search capability, whereby sounds, such as animal sounds, are captured and compared to sounds in various data stores to identify the animal specie or other requested information about the source of the audio signal.

Spatial and temporal recordation of events, wherein for example, a user can combine visual information with virtual or invisible information such as GPS. In one application, the system allows the user to spatially record sound,

and whenever the user reaches a destination location the system reminds the user by playing the recorded message.

Real-time solution of mathematical or geometric problems, real time problem solving. For example, this feature can be used to balance check books, to convert currencies, and in a variety of similar other applications. In another specific example, the system can assist the user in solving geometric problems using the imaged information and present solutions to the user. Practical applications involve home repair and replacing parts when dimensions are not known.

Mass spectrometry: For example, a user can acquire chemical and other data about a material, and the system will automatically formulate and apply a search for identifying the material.

CLAIM OBJECTION

Claim 2 was objected to under 37 CFR 1.75(c). Applicant has now canceled claim 2, and the objection has thus become moot.

CLAIM REJECTIONS UNDER 35 USC 102

A. Anticipation Rejection in the Office Action

The issues for review is whether claims 1, 3, 5 - 7, 11 - 13, 16 - 17, 39 - 43, and 45 - 46 are anticipated by Smith et al. (U.S. Pat. No. 5,970,499), hereinafter referred to as "Smith," as indicated by the office action.

Claims 1, 3, 5-7, 11-13, 16-17, 39-43, and 45-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith, reasoning that: "As per claims 1, 13, and 39, Smith teaches of a system and a method for automatically (see col.2, lines 47-49) associating contextual input data (see Fig.2, #242; col.5, lines 24-28 & 57-64; col.10, lines 27-35 & 49-52; and col.1 1, lines 50-53) with available multimedia resources (see abstract), comprising: a contextual input device or means for capturing the contextual input data (see Fig.2, #245; and col.5, lines 13-17 & 24-28); an assistant device or means (see Fig.2, #243: "server") for processing the contextual input data captured by the contextual input device, and for formulating a query based on processed contextual input data and a user profile (see Fig.2, #210 & #242; and col.5, lines 57-64); and a contextual multimedia association module or means for associating the processed contextual input data with the multimedia resources (see Fig.2, #220) and for generating association matches (see Fig.2; and col.5, line 64 to col.6, line 16)."

B. Legal Standard for Lack of Novelty (Anticipation)

Applicant respectfully submits that Smith does not disclose all the elements and limitations of the independent claims 1, 13, and 39. Consequently, claims 1, 13, and 39 are not anticipated under 35 U.S.C. 102, and the allowance of these claims and the claims dependent thereon are earnestly solicited. In support of this position, Applicant submits the following arguments:

The standard for lack of novelty, that is, for "anticipation," is one of strict identity. To anticipate a claim for a patent, a single prior source must contain all its essential elements, and the burden of proving such anticipation is on the party making such assertion of anticipation. Anticipation cannot be shown by combining more than one reference to show the elements of the claimed invention. The amount of newness and usefulness need only be minuscule to avoid a finding of lack of novelty.

The following are two court opinions in support of Applicant's position of non anticipation, with emphasis added for clarity purposes:

- "Anticipation under Section 102 can be found only if a reference shows exactly what is claimed; where there are differences between the reference disclosures and the claim, a rejection must be based on obviousness under Section 103." *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).
- "Absence from a cited reference of any element of a claim of a patent negates anticipation of that claim by the reference." *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 USPQ 81 (Fed. Cir. 1986), on rehearing, 231 USPQ 160 (Fed. Cir. 1986).

C. Application of the Anticipation Standard to Smith

Considering claim 1 as the exemplary claim, Applicant respectfully submits that Smith does not disclose the following elements and limitations recited in claim 1:

- a contextual input device for capturing the contextual input data;
- an assistant device for processing the contextual input data captured by the contextual input device, and for formulating a query based on processed contextual input data and a user profile; and
- a contextual multimedia association module for associating the processed contextual input data with the multimedia resources and for generating association matches.

C.1. Client 245 in Smith does not capture the contextual input data

The Examiner analogizes the "contextual input device" recited in the instant claim 1 with client 245 of Smith; and further analogizes the "contextual input data" with "filtering context 242". Applicant respectfully submits that, the "filtering context 242" is not "captured" by client 245, but is rather collected or stored on client 245. Capturing implies actively acquiring the "contextual input data".

In addition, there is no indication that Smith's client 245 actually "captures" the filtering context data 242: patient history; procedural information; user preferences; menu-driven selection; spatial location; and map. It is also not clear how the filtering context data 242, for example the user preferences, could be "captured". It is most likely that this information is collected or stored on the client 245.

C.2. Server 243 in Smith does not formulate a query based on processed contextual input data and a user profile

The Examiner analogizes the "assistant device" recited in the instant claim 1 with server 243 of Smith. Applicant respectfully submits that server 243 does not formulate a query based on the filtering context data 242 and a user profile. Smith's mapping operation as implemented by the mapping engine 206 does not constitute a "query," in that it is a predetermined mapping operation that does not change based on the filtering context data 242. On the contrary, a query by definition changes as its input parameters changes; otherwise, it would not be a query per se.

In addition, it is not clear whether the Examiner intended the term "user" to mean the client 245 or the patient. In either case, the mapping operation is not based on either the client 245 profile or the patient profile.

C.3. Audio, Video Component 220 in Smith does not associate the filtering context data 242 with the multimedia resources

The Examiner analogizes the "contextual multimedia association module" recited in the instant claim 1 with the audio, video component of Smith. Applicant respectfully submits that the audio, video component does not associate the "processed" contextual input data with the multimedia resources.

Referring to Fig. 2 in Smith, and presuming that the output of the deformation engine 204 is analogous to the processed contextual input data,

this output is fed directly to the mapping engine 206, and is not inputted to the audio, video component 220 (or the search and filter engine 210), and thus no "association" is possible.

As a result, claim 1 and the claims dependent thereon are not anticipated by Smith. In addition, independent claims 13 and 39 and the claims dependent thereon are not anticipated by Smith for containing generally similar elements to those of claim 1.

CLAIM REJECTIONS UNDER 35 USC 103

A. Obviousness Rejection in the Office Action

The issues for review is whether claims 8 - 10, 14, 18 - 20, and 44 are obvious in view of Smith, *supra*, in view of Bull et al. (U.S. Pat. No. 5,901,287), hereinafter referred to as "Bull."

Claims 8 - 10, 14, 18 - 20, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith in view of Bull, reasoning that: "As per claims 8, 18, and 44, Smith does not explicitly teach wherein the assistant device updates the user digital profile based on recent association matches. Bull teaches of updating the user digital profile based on recent association matches (see col.8, line 65 to col.9, line 2 and col.12, lines 2-4). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Bull within the system of Smith by updating user profile within the system and method of associating contextual input data with multimedia resources because by keeping an updated profile of the user, the "composite data" of Smith can be retrieved more quickly and

efficiently with less processing requirement with each request attempt, and Smith teaches of a request including user or patient information (see Fig.2, #242 and #200)."

B. Legal Standard for Obviousness

Applicant respectfully traverses the obviousness rejection of claims 8 - 10, 14, 18 - 20, and 44, and submits that these claims and the claims dependent thereon are not obvious in view of Smith in light of Bull, and are patentable thereover. In support of Applicant's position of non obviousness, Applicant submits the following legal authorities that set the general legal standard for non/obviousness, with emphasis added for added clarity:

- MPEP 706.02(j), "**To establish a prima facie case of obviousness, three basic criteria must be met.** First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) ... The initial burden is on the examiner to provide some **suggestion of the desirability** of doing what the inventor has done. 'To support the conclusion that the claimed invention is directed to obvious subject matter, either the **references must expressly or impliedly suggest the claimed invention** or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.' *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."
- **In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is** not whether the differences themselves would have been obvious, but **whether the claimed invention as a whole**

would have been obvious. The prior art perceived a need for mechanisms to dampen resonance, whereas the inventor eliminated the need for dampening via the one-piece gapless support structure. "Because that insight was contrary to the understandings and expectations of the art, the structure effectuating it would not have been obvious to those skilled in the art." 713 F.2d at 785, 218 USPQ at 700 (citations omitted).

- MPEP §2143.03, "All Claim Limitations Must Be Taught or Suggested: To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)."
- MPEP §2143.01, "The Prior Art Must Suggest The Desirability Of The Claimed Invention: There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a prima facie case of obvious was held improper). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).
- "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1598 (citing *ACS Hosp. Sys. v. Montefiore Hosp.*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)). What a reference teaches and whether it teaches toward or away from the claimed invention are questions of fact. See *Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 960-61, 220 USPQ 592, 599-600 (Fed. Cir. 1983), cert. denied, 469 U.S. 835, 83 L. Ed. 2d 69, 105 S. Ct. 127 (1984)."
- "When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the

references. See *In re Geiger*, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987)." Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See MPEP 2143.01; *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

- "With respect to core factual findings in a determination of patentability, however, the Board cannot simply reach conclusions based on its own understanding or experience -- or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings." See *In re Zurko*, 258 F.3d 1379 (Fed. Cir. 2001).
- "We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), *Para-Ordinance Mfg. v. SGS Imports Intern., Inc.*, 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), although "the suggestion more often comes from the teachings of the pertinent references," *Rouffet*, 149 F.3d at 1355, 47 USPQ2d at 1456. The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., *C.R. Bard*, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." E.g., *McElmurry v. Arkansas Power & Light Co.*, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact."); *In re Sichert*, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977)." See *In re Dembicza*k, 175 F.3d 994 (Fed. Cir. 1999).
- "To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no

knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." See *In re Rouffet*, 149, F.3d 1350 (Fed. Cir. 1998).

- The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).
- If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

C. Application of the Obviousness Standard to the Present Invention

The office action states that with regard to claims 8, 18, and 44, "Smith does not explicitly teach wherein the assistant device updates the user digital profile based on recent association matches. Bull teaches of updating the user digital profile based on recent association matches (see col.8, line 65 to col.9, line 2 and col.12, lines 2-4)..." Emphasis added.

Applicant respectfully responds by submitting that the element (feature or limitation) of "updating the digital profile" taken individually, and out of the context of the present invention is not new. However, and as stated earlier, the obviousness test is that in "determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the

differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious."

Since the main reference, namely Smith, does not recite this essential element of the present invention, the design resulting from the hypothetical combination of the cited references, would not render the present invention legally obvious.

In addition, and as stated earlier, "[w]hen a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references." Applicant respectfully submits that the motivations or suggestions provided in the office action do not provide sufficient suggestion of the desirability of doing what the inventor has done in that the cited references do not expressly or impliedly suggest the claimed invention.

In support of this statement, the Examiner submits that one of the motivations to combine the cited references is as follows: "It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Bull within the system of Smith by updating user profile within the system and method of associating contextual input data with multimedia resources because by keeping an updated profile of the user, the "composite data" of Smith can be retrieved more quickly and efficiently with less processing requirement with each request attempt, and Smith teaches of a request including user or patient information (see Fig.2, #242 and #200)." Emphasis added. The foregoing justification describes a "general interest," and does not meet the burden of proving obviousness, since this justification does not consider the invention as a whole. The user's

wishes and desires are irrelevant unless they are tied to the present invention as a whole.

Furthermore, and as discussed earlier, even if the two cited references were to be combined, the resulting design would still not be similar to that of the present invention. As stated earlier in connection with the anticipation arguments, Smith does not describe a user profile. As a result, Bull cannot update a non-existing element.

Therefore, claim 8 and the claims dependent thereon are allowable, and such allowance is respectfully requested. Similarly, dependent claims 18 and 44 and the claims dependent thereon are allowable for reciting comparable elements to those of claim 8.

CONCLUSION

All the claims presently on file in the present application are in condition for immediate allowance, and such action is respectfully requested.

Respectfully submitted,



Date: January 31, 2004
Samuel A. Kassatly Law Office
6819 Trinidad Drive
San Jose, CA 95120
Tel. (408) 323-5111
Fax: (408) 323-5112

Samuel A. Kassatly
Attorney for Applicant
Reg. No. 32,247

Attachment: Appendix A

APPENDIX A

CLAIMS ON APPEAL

1. A system for automatically associating contextual input data with available multimedia resources, comprising:
 - a contextual input device for capturing the contextual input data;
 - an assistant device for processing the contextual input data captured by the contextual input device, and for formulating a query based on processed contextual input data and a user profile;
 - a contextual multimedia association module for associating the processed contextual input data with the multimedia resources and for generating association matches
2. (Canceled)
3. The system according to claim 1, wherein the assistant device automatically formulates the query based on a contextual input from the user.
5. The system according to claim 3, wherein the contextual input device digitizes the contextual input data.
6. The system according to claim 5, wherein the assistant device presents the association matches to a user.

7. The system according to claim 3, wherein the assistant device develops the user profile based on association matches that were previously presented to the user.

8. The system according to claim 7, wherein the assistant device updates the user digital profile based on recent association matches.

9. The system according to claim 8, wherein the contextual multimedia association applies the query to a data store on a network.

10. The system according to claim 9, wherein the network includes the World Wide Web.

11. The system according to claim 7, wherein the contextual input data are based on image signals; and
wherein the assistant device enhances the quality of the image signals.

12. The system according to claim 7, wherein the contextual input data are based on audio signals; and
wherein the assistant device enhances the quality of the audio signals.

13. A method for automatically associating contextual input data with available multimedia resources, comprising:
capturing the contextual input data;
processing the contextual input data;
formulating a query based on processed contextual input data and a user profile; and

associating the processed contextual input data with the multimedia resources and generating association matches.

14. The method according to claim 18, wherein formulating the query comprises automatically formulating the query based on a contextual input from the user.

16. The method according to claim 13, further comprising presenting the association matches to a user.

17. The method according to claim 16, further comprising developing a digital profile for a user based on association matches which were previously presented to the user.

18. The method according to claim 17, wherein developing the digital profile comprises updating the user digital profile based on recent association matches.

19. The method according to claim 18, wherein associating the processed contextual input data comprises applying the query to a data store on a network.

20. The method according to claim 18, wherein the contextual input data are based on any one or more of image signals or audio signals; and wherein processing the contextual input data comprises enhancing the quality of the any one or more of image signals or audio signals.

39. A system for automatically associating contextual input data with available multimedia resources, comprising:

- means for capturing the contextual input data;
- means for processing the contextual input data and formulating a query based on processed contextual input data and a user profile; and
- means for associating the processed contextual input data with the multimedia resources and generating association matches.

40. The system according to claim 42, wherein the means for processing and formulating the query comprises means for automatically formulating the query based on a contextual input from a user.

42. The system according to claim 39, further comprising means for presenting the association matches to a user.

43. The system according to claim 42, further comprising means for developing a digital profile for a user based on association matches which were previously presented to the user.

44. The system according to claim 43, wherein the means for developing the digital profile comprising means for updating the user digital profile based on recent association matches.

45. The system according to claim 42, wherein the means for associating the processed contextual input data comprises means for applying the query to a data store on a network.

46. The system according to claim 42, wherein the contextual input data are based on any one or more of image signals or audio signals; and wherein the means for processing the contextual input data comprises means for enhancing the quality of the any one or more of image signals or audio signals.
